

ABSTRACT

**Antimicrobial Activity Test of
1-(4'-nitrobenzoyl)-1,3-diethylurea
Against *Bacillus subtilis*, *Pseudomonas aeruginosa*, and
Candida albicans using Broth Dilution Method**

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The antimicrobial activity of 1-(4'-nitrobenzoyl)-1,3-diethylurea against *Bacillus subtilis*, *Pseudomonas aeruginosa*, and *Candida albicans* using broth dilution method was studied. The purpose of this study are to determine the antimicrobial activity of 1-(4'-nitrobenzoyl)-1,3-diethylurea against *Bacillus subtilis*, *Pseudomonas aeruginosa*, and *Candida albicans* and to compare the antimicrobial activity of 1-(4'-nitrobenzoyl)-1,3-diethylurea against *Bacillus subtilis* with the activity against *Pseudomonas aeruginosa*. The antimicrobial activity was defined as minimum inhibitory concentration (MIC). The compound showed MIC 600 µg/ml against *Bacillus subtilis*, 650 µg/ml against *Pseudomonas aeruginosa*, and 750 µg/ml against *Candida albicans*. It could be concluded that 1-(4'-nitrobenzoyl)-1,3-diethylurea have antimicrobial activity against *Bacillus subtilis*, *Pseudomonas aeruginosa*, *Candida albicans*. The activity against *Pseudomonas aeruginosa* was higher than against *Bacillus subtilis*.

Keyword: 1-(4'-nitrobenzoyl)-1,3-diethylurea, MIC, Broth Dilution Method